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09/458,896	12/10/1999	MICHAEL C. BERTRAM	533/038	9421

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EXAMINER	
MOLINARI, MICHAEL J	

ART UNIT	PAPER NUMBER
2665	13

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/458,896	Applicant(s) BERTRAM ET AL.	
	Examiner Michael J Molinari	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 March 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-17* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16 and 17* is/are rejected.

7)☒ Claim(s) *15* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-4, 7-11, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Norizuki et al. (U.S. Patent No. 5,570,361).

3. Referring to claim 1, Norizuki et al. disclose in an information distribution system providing content data and asset data comprising navigational information to at least one subscriber, apparatus comprising: a NULL packet inserter (ATM Switch Unit, see column 7, lines 5-9), for inserting NULL transport packets (idle cells) wihin a transport stream including content packets (user information) (see column 7, lines 5-9); a transport processor (ATM Switch Unit, see column 15, lines 29-31), for replacing at least some of said NULL packets with asset packets comprising said navigational information (see column 15, lines 29-31. The transport information contains information about the path of the connection, and thus provides navigational information. See also column 15, lines 36-41) associated with (The transport information is associated with the user information because it provides information about the path that the user information is taking) said content packets (user information) to produce a transport stream including content packets comprising said navigational information and asset

packets (see column 15, lines 29-31. The ATM switch replaces the empty data of an idle cell with useful information, thus making the cell no longer an "idle" cell).

4. Referring to claim 2, Norizuki et al. disclose a first transport packetizer (ATM Switch Unit, see column 15, lines 29-31), for packetizing said asset data to produce said asset packets (see column 15, lines 29-31 and note that the ATM switch unit maps the traffic parameters into the cell, thus packetizing the asset data); and a second transport packetizer (ATM Switch Unit, see column 7, lines 5-9, note that the ATM switch unit is the source of the user data), cooperating with said NULL packet inserter, for packetizing said content data and producing said transport stream including content packets.

5. Referring to claim 3, Norizuki et al. disclose a storage means (buffer), coupled to said transport processor, for storing said asset packets and said transport stream including content packets and NULL packets (see column 8, lines 12-13). Also see Figures 29 and 30, which show other buffers that also meet the limitations of this claim.

6. Referring to claim 4, Norizuki et al. disclose a storage means (buffer), coupled to said transport processor, for storing said asset packets and said transport stream including content packets and NULL packets (see column 8, lines 12-13).

7. Referring to claim 7, Norizuki et al. disclose that said second transport packetizer (ATM Switch Unit, see column 7, lines 5-9) provides mapping data indicative of the location of NULL packets within said transport stream including content packets and NULL packets (see Figures 4 and 5 and note that the idle cell (created by the ATM Switch Unit) contains different header information that identifies it as an idle cell and that is used by the idle cell detector to identify the

cell as an idle cell. This information is used to identify the location of idle cells in the transport stream).

8. Referring to claim 8, Norizuki et al. disclose that said transport processor is responsive to an asset rate control signal (idle cell rate) to adapt a utilization level of said NULL packets (see column 7, lines 21-31).

9. Referring to claim 9, disclose that said transport processor is responsive to an asset count signal (counting value, see column 7, line 51) to replace a plurality of NULL packets with each asset packet (see column 7, lines 42-58).

10. Referring to claim 10, Norizuki et al. disclose in an information distribution system providing content data and asset data comprising navigational information to at least one subscriber, a method for processing content and asset information comprising the steps of: inserting, within a transport stream including content packets (user information), a plurality of NULL packets (idle cells); and replacing at least some of said NULL packets with asset packets comprising said navigational information (see column 15, lines 29-31. The transport information contains information about the path of the connection, and thus provides navigational invormation. See also column 15, lines 36-41) associated with (The transport information is associated with the user information because it provides information about the path that the user information is taking) said content packets (user information) to produce a transport stream including content packets comprising said navigational information and asset packets (see column 15, lines 29-31. The ATM switch replaces the empty data of an idle cell with useful information, thus making the cell no longer an "idle" cell).

11. Referring to claim 11, Norizuki et al. disclose that said asset packets are processed according to the steps of: packetizing, using a transport packetizer, at least one information stream comprising an asset information stream (see column 15, lines 29-31), said asset information stream being associated with a content stream (The transport information is associated with the user information because it provides information about the path that the user information is taking).

12. Referring to claim 14, Norizuki et al. disclose the step of providing mapping data indicative of the location of NULL packets within said transport stream including content packets and NULL packets (see Figures 4 and 5 and note that the idle cell (created by the ATM Switch Unit) contains different header information that identifies it as an idle cell and that is used by the idle cell detector to identify the cell as an idle cell. This information is used to identify the location of idle cells in the transport stream).

13. Referring to claim 16, Norizuki et al. disclose that said step of inserting said asset packets is repeated according to an asset injection count (counting value, see column 7, lines 42-58).

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

15. Claims 5 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norizuki et al. (U.S. Patent No. 5,570,361) in view of LaJoie et al. (U.S. Patent No. 5,850,218).

16. Referring to claims 5 and 17, Norizuki et al. disclose an apparatus as disclosed in claims 4 and 11. Norizuki et al. differ from the claims 5 and 17 in that they fail to disclose a session controller for interacting with a subscriber to receive a content request and that causes both transport streams to be provided to the transport processor. However, using session controllers to receive requests from subscribers and to initiate the transmission of transport streams to be delivered to said subscribers is well known in the art. For example, LaJoi et al. disclose such a session controller (interactive cable gateway, Figure 1), which has the advantage of interacting with subscribers to enable them to select and receive the content they wish to receive. One skilled in the art would have recognized the advantage of enabling subscribers to select and receive the content they wish to receive as taught by LaJoi et al. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the session controller as taught by LaJoi et al. into the invention of Norizuki et al. to achieve the advantage of enabling subscribers to select and receive the content they wish to receive.

17. Claims 6 and 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Norizuki et al. (U.S. Patent No. 5,570,361).

18. Referring to claims 6 and 13, Norizuki et al. disclose that said plurality of NULL packets to be inserted into said transport stream including content packets is determined with respect to a certain condition (see column 7, lines 5-9, which discloses inserting a NULL packet when there is no user cell to transmit). Norizuki et al. differ from claim 13 in that they fail to disclose a specific signal that signals the lack of user information to be transmitted. However, the use of a signal to indicate the lack of user data for transmission is well known in the art. For example, Masaki et al. teach that the use of just such a signal (see column 2, lines 29-41) is conventional.

One skilled in the art would have recognized the advantage of using a signal to indicate the lack of user information to be transmitted. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of such a signal as taught by Masaki et al. into the invention of Norizuki et al. to achieve the advantage of using a conventional means of implementing an ATM switch capable of inserting idle cells into a transport stream.

19. Referring to claim 12, Norizuki et al. fail to disclose that said asset information stream comprises a plurality of asset information sub-streams. However, the use of sub-streams within data streams is old and well known in the art and has the advantage of providing more control over data flows in a network. One skilled in the art at the time of the invention would have been aware of the uses and advantages of sub-streams. Therefore, it would have been obvious to a person with ordinary skill in the art at the time of the invention to incorporate the use of sub-streams into the invention of Norizuki et al. to achieve the advantage of providing more control over data flows in the network.

Allowable Subject Matter

20. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

21. Applicant's arguments filed 9 March 2003 have been fully considered but they are not persuasive.

22. Referring to claims 1 and 10, Applicant has argued that Norizuki et al. fail to disclose that the NULL packets are replaced with packets comprising the navigational information associated with the content packet. However, as stated above, Norizuki et al. do teach such a limitation. Specifically, Norizuki et al. disclose that the navigational information comprises information about network conditions that the ATM switch unit uses to start or stop the traffic control operation. This information is navigational because it contains information about the path that packets take to reach their destination. The navigational information is associated with the content packets because it contains information about the paths that the content packets are taking and, in fact, the navigational information directly influences the flow of content packets.

23. Referring to claims 5 and 17, Applicant has argued that Norizuki et al. fail to teach "a transport processor, for replacing at least some of said NULL packets with asset packets comprising said navigational information associated with said content packets to produce a transport stream including content packets comprising said navigation information and asset packets." However, as explained above, Norizuki et al. do in fact teach such limitations. Applicant has further argued that LaJoie et al. fail to disclose such limitations. The Examiner concedes that LaJoie et al. do not teach such a transport processor. However, it is not necessary for either reference to contain all the limitations (if either reference did contain all the limitations, a 102 rejection would be made), but merely for the combination of the two references to contain all of the claimed limitations. Norizuki et al. teach the claimed transport processor and LaJoie et al. teach the session controller. Thus, all the claimed limitations are

contained in at least one of the two references. Furthermore, one skilled in the art at the time of the invention would have recognized the advantages of each and would have known to combine them. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the session controller of LaJoie et al. and the transport processor of Norizuki et al.

24. In response to applicant's argument that the combination of Norizuki et al. and LaJoie et al. fails to embrace the problem that the applicant's invention solves, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

25. Referring to claims 6 and 13, Applicant has argued that Norizuki et al. fail to teach "a transport processor, for replacing at least some of said NULL packets with asset packets comprising said navigational information associated with said content packets to produce a transport stream including content packets comprising said navigation information and asset packets." However, as explained above, Norizuki et al. do in fact teach such limitations. Therefore, the combination of Norizuki et al. and Masaki et al. does teach the claimed transport processor.

Conclusion

26. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Molinari whose telephone number is (703) 305-5742. The examiner can normally be reached on Monday-Friday 9am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (703) 308-6602. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9314 for regular communications and (703) 872-9315 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Michael Joseph Molinari
June 30, 2003

ALPUS H. HSU
PRIMARY EXAMINER